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India: Historical Beginnings and the Concept of the Aryan

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Aryan Origins: Brief History of Linguistic Arguments

Madhav M. Deshpande

Introduction

The discussion of the terms 'Ārya' and 'Anārya' is normally dominated on the one hand by linguistics and archaeology, and, now more increasingly in the context of politics of knowledge as reflected in colonial and post-colonial histories of South Asia. Even in the ancient and classical period which is dominated by the discourses of the Hindu Dharmaśāstras (and Epics) on the one hand, and the contesting traditions of Buddhism and Jainism, these terms have played an equally significant role expressing conceptions of linguistic, ethnic, moral and spiritual identity, purity, and superiority. I have discussed many of these issues in my previous studies (see: Bibliography). Here, I wish to review primarily the linguistic side of the Aryan question and describe where the linguistic arguments stand at present. In the literature of linguistics, the term Aryan is used to refer specifically to those who were speakers of Indo-Iranian languages, the Indo-Iranian itself being a branch of the larger Indo-European language family. The term Ārya as a self-referring ethnic term is seen

only in the ancient linguistic materials found in Iran and India. The ancient linguistic material of the Indo-Iranian branch consists of the Vedic texts of ancient India, and the Avestan and Old-Persian texts of ancient Iran. Linguistically related material is found in the treaty of Mitannis in Anatolia dating to the 14th century BC, though the word Ārya is not found in that region to my knowledge. Thus, in the careful linguistic use of the term Aryan, it is used to refer to speakers of Indo-Iranian languages. However, in less careful, but apparently quite extensive usage, the term is sometimes used to refer to the entire Indo-European language family. With the uncritical equation of language and race in the nineteenth century, the term Aryan came to assume a racial significance, and it was extensively used in that manner by western historians, by the Nazis, and still continues to be used that way by white supremacist groups in many parts of the world, cf. Day (1994). The term Aryan, influenced by its usage in Europe, also appears in racist sense in many Indian writings of the 19th and 20th centuries, cf. Deshpande (2005). In the 19th century India, the term also came to be used to refer to a revivalist purist Hindu identity by groups like the Ārya Samāja, and it continues to vibrate with Hindu nationalist groups till today. This widely divergent and multi-valent usage of the term Ārya in the available literature of the last two centuries has complicated our understanding of the historical situation, which needs a careful sorting of the various meanings of this term, before one can deal with specific historical reconstructions. I do not believe that we can explain the linguistic make-up of ancient South Asia, without the assumption of migration of the speakers of a branch of Indo-Iranian into the sub-continent and their gradual contact and convergence with speakers of other languages such as Dravidian and Austro-Asiatic. Such a migration does not entail a concerted invasion of the region,

such as the invasion by the forces of Alexander the Great, but neither does this necessarily require the imperceptibly slow and non-warlike expansions of agricultural communities as suggested by the alternative Indo-European history of Colin Renfrew (1988).

I respect the caution expressed by Kenneth A.R. Kennedy (1995: 60): "Affirmations as emphatic as those voiced by the Allchins insure that the search for the Aryan presence in linguistic and archaeological sources will survive for some time to come. However, biological anthropologists remain unable to lend support to any of the theories concerning an Aryan biological or demographic entity within the contexts of linguistics and archaeology." Indeed, one should not go by the old identifications of linguistic, religious, and racial identities. However, Kennedy's conclusions are not really contradictory to linguistic research, if we understand that there is no correlation between racial and linguistic identities. People speaking the same language can belong to different racial backgounds, and people of the same racial background may speak different languages. If we dissociate linguistic, cultural, and biological identities, as we need to, then we can certainly find cases of distinct linguistic identities where one would be hard-pressed to find biological differences. The speakers of Indo-Aryan Marathi and Dravidian Kannada can hardly be distinguished from each other on biological grounds, and yet these two languages belong to different linguistic families. There is no reason why the Aryans and non-Aryans of the Vedic period or of Indus Valley could not be linguistically different without necessarily showing up biological differences.

The differences as expressed in the Ṛgveda by the terms *anindra* "those who do not worship Indra," *adeva* "those who do not worship Devas," *ayajyu* "those who do not offer sacrifices," *śiśnadeva* "those who worship phallic gods," *mūradeva*"those who worship images of gods" etc. are cultural differences. The term *mṛdhravāc* and possibly *anās* are indicative of linguistic differences. While the outsiders can hardly tell the difference between a Sinhalese and a Sri Lankan Tamil, the differences are perceptible to the populations of Sri Lanka. Similarly, even if our biologists of today cannot distinguish between the skeletons of Aryans and Non-Aryans, there is no reason to deny to them the differences as they perceived; for a critique of Kennedy and others, see Ratnagar (1998) and (1999). When the Ṛgvedic poets invoke their gods to help the Ārya community and destroy the Dāsa/Dasyus, we are dealing with ethnically and culturally perceived differences. Within the Ṛgvedic period, there appears to have been a gradual move away from the earlier violent conflicts between the Ārya varṇa and the Dāsa varṇa (cf. *yo dāsaṃ varṇam adharam*, *guhā kaḥ*, *RV* II.12.4) toward some sort of co-operative and collaborative relationship between these two varṇas as hinted in *RV* I.179.6 : *ubhau varṇāv ṛṣir ugraḥ pupoṣa* (cf. P.V. Kane, *History of Dharmaśāstra*, Vol. II, Pt. I, p, 25, fn. 53). In my publications (Deshpande, 1993a), I have dealt with the details of how a slow inter-ethnic convergence may have come about in ancient India, and how the ancient Indian terminology of *bīja-kṣetra* "seed-field" provides access to a cultural understanding of biology.

In this connection, we have a lot of terminological dilemmas to deal with. For example, when we use the word "Ārya," what do we mean by such a word? We know that the word was used as a self-referring term only by the ancient Iranians and by the authors of the Vedic hymns. Kuiper (1991: 6) says: "[In the RV] 'Aryans' were in general those who maintained the world order by means of sacrifices and gifts...." Quite apart from the now-unacceptable racial interpretation of this term, Kuiper's definition makes this

term purely functional, and stretches it away from any association with a real or perceived ethnicity. On the other hand, consider Franklin Southworth's comments: (1995: 261): "Therefore, while it is appropriate to refer to 'speakers of Proto-Dravidian' or 'members of the proto-Dravidian speech community,' or 'speakers of Old Indo-Aryan,' or even (when justified) 'Dravidian-Old Indo-Aryan bilinguals,' the use of labels such as 'the Dravidians' or 'the Aryans' is not justifiable in linguistic terms. In fact, their use in any context is problematic, since they can only be justified by demonstrating the existence of a group which both spoke the language in question and possessed particular attributes."

But before getting into a review of the purely linguistic arguments, it is useful to see the range of usage of these terms in premodern literature. For example, the term Ārya referring to an ethnic identity occurs in the Ṛgveda, sometimes in conflict with other communities called Dāsas and Dasyus, sometimes in alliances with them as in the famous War of Ten Kings (*dāśarājña*), and sometimes even in a balanced complementarity. We can also usefully compare Manu's Lawbook with the warning issued by the linguist Franklin Southworth (1995: 261). A term like 'Ārya,' as the usage of the Dharmaśāstras shows, was indeed used in linguistic, ethnic, and moral contexts, and that it also had extensions into designations of regions. Manu (10.57) says that one should determine the low-status of a person who looks like an Ārya (*āryarūpam iva*), but is an Anārya (*anārya*), on the basis of his actions (*karmabhiḥ svair vibhāvayet*). This verse shows that there was indeed a prototypical expectation of how an Ārya person looks like, i.e. his physical features (*āryarūpa*). In this context, the word *rūpa* "form, appearance" does not appear to have any symbolic meaning. This indicates that the physical features which were associated with a prototypical Ārya were indeed not restricted to only those

who were socially recognized as Ārya. Manu, however, does not specify the Ārya physical features, though Patañjali's Mahābhāṣya (on P.2.2.6) does say that normally one would not recognize a person "dark like the heap of Urad lentils" (*māṣarāśivarṇa*) sitting in the market place to be a Brahmin, and that a Brahmin is normally expected to look *gaura* "fair," *śucyācāra* "with clean conduct," and *piṅgalakeśa* "with tawny colored hair." Manu recognizes that confusion extended also to the use of languages. Manu (10.45: *mukhabāhūrupajjānām yā loke jātayo bahiḥ/mlecchavācaś cāryavācas te sarve dasyavaḥ smṛtāḥ //*) indicates that there are people all over the known world who speak Ārya and Mleccha languages, but the use of language cannot be taken as a factor determining their social identity. Outside the four varṇas, born from the head, arms, thighs, and feet of the creator, everyone is a barbarian Dasyu, whether he speaks an Ārya or a Mleccha language. This statement clearly says that speaking an Ārya language does not make a Mleccha/Dasyu into an Ārya. This gives us some sense of the baggage the term Ārya carries with it, and the baggage that we must recognize before a clearer sense of history can begin to emerge.

Beginnings of Indo-European Linguistics

Glimpses of the beginning of the modern study of Indian languages opened with encounters of Europeans with India. P. Sassetti, who was in Goa between 1581 and 1588, noted that Sanskrit had many words in common with Italian, "particularly in the numerals six to nine, in the names for God, snake, and many others," Lockwood (1971: 22). In 1767, P. Cœurdous asked the French Academy for the reasons for the striking similarities between Sanskrit, Greek and Latin, and he suggested that such similarities were relics of the primitive language of mankind after the confusion of tongues

at Babel. He compares, for instance: Skt. *dānam* 'gift,' *devās* 'god,' *jānu* 'knee,' *mádhyas* 'middle,' and *vidhávā* 'widow' with Lat. *dōnum*, *deus*, *genū*, and *vidua*, and also the present tense of the verb 'to be' : Skt. Sg. 1 *ásmi*, 2 *ási*, 3 *asti*, Pl. 1 *smás*, 2 *sthá*, 3 *sánti*, with Lat. *sum*, *es*, *est*, *sumus*, *estis*, and *sunt*. However, the credit for suggesting a common bond in the clearest terms goes to Sir William Jones, who declared in 1786 before the Royal Asiatic Society of Bengal in Calcutta:

> "The Sanskrit language, whatever be its antiquity, is of a wonderful structure; more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either; yet bearing to both of them a stronger affinity, both in the roots of verbs, and in the forms of grammar, than could possibly have been produced by accident; so strong indeed that no philologer could examine them all three without believing them to have sprung from some common source, which perhaps no longer exists. There is similar reason, though not quite so forcible, for supposing that both the Gothick and the Celtick, though blended with a very different idiom, had the same origin with Sanskrit; and the old Persian might be added to the same family."

It should be noted that while William Jones argued for a common ancestral bond between Sanskrit, Greek, Latin, as well as Germanic, Celtic, and Iranian languages, his words are important: "*sprung from some common source, which perhaps no longer exists.*" As Trautmann (1997, 1998) has demonstrated in detail, Jones was still working under the Biblical ideas of dispersal of languages after Babel, and did not look upon Sanskrit itself as the source of all Indo-European languages. It was Friedrich von Schlegel (1772-1829) who in his work *Über die Sprache und Weisheit der Indier* published in 1808 declared Sanskrit to be the parent language, of which Greek, Latin, Persian, and the members of the Germanic branch were the more or less degenerate descendants, and more remotely connected were Armenian, Slavonic and Celtic languages. Schlegel based his conclusions on a comparative study of the vocabulary and grammatical structure of these languages. While the comparative method he initiated survived, his conclusions were soon overthrown. Laying the systematic foundations of comparative Indo-European philology, Franz Bopp in his *Über das Konugationssystem der Sanskritsprache in Vergleichung mit jenen der griechischen, lateinischen, persischen und germanischen Sprache* (1816) defined the position of Sanskrit within the Indo-European family: "I do not believe that Greek, Latin and the other European languages are to be considered as derived from Sanskrit ... I feel rather inclined to consider them altogether as subsequent variations of one original tongue, which Sanskrit has preserved more perfectly." In 1833, Bopp published his monumental work on Comparative Indo-European grammar: *Vergleichende Grammatik des Sanskrit, Zend, Armenischen, Griechischen, Lateinischen, Lithauischen, Altslawischen, Gothischen und Deutschen*. While William Jones deserves the credit for announcing the discovery of the genetic relationship between Indo-European languages, it was in Germany under Bopp and his successors that the science of Indo-European philology progressed with great speed.

A. Schleicher (1821-68) initiated the reconstruction of prehistoric Indo-European forms. By comparing the forms recorded in the daughter languages, one can imagine how the word looked in the parent Indo-European language. By comparing words for horse, i.e. Skt. *áśvas*, Gk. *híppos*, also *íkkos*, and Lat. *equus*, archac *equos*, and by assuming that Sanskrit has kept the vowels of the parent language,

Schleicher postulated **akvas* as the word for horse in the parent Indo-European language. Subsequent research pointed out that the reconstruction should rather be **ekwos*, since it had by then become clear that the vowel system of Sanskrit, far from faithfully reflecting the prehistoric stage, had in fact undergone sweeping changes which resulted in the transformation of both original *e* and *o* into *a*. Gradually it became clear that in certain respects the languages of Europe were more archaic than Sanskrit. "The discovery of the Law of Palatals was naturally a blow to the prestige of Sanskrit which philologists had hitherto assumed to stand close to the parent tongue" (Lockwood 1971: 28). The results of research in this field were crowned with the work of Karl Brugmann (1849-1919) and B. Delbrück (1842-1922). While other works of this period are now mainly of historical interest, Delbrück's *Grundriss der vergleichenden Grammatik der indo-germanischen Sprachen* (1886-1916) in five volumes remains an unequalled source of factual information and is indispensable for serious work on Indo-European linguistics. The position of Sanskrit within the Indo-European family as defined since the work of Brugmann and Delbrück has changed little within this field, even though great strides have been made in many areas of historical and comparative linguistics.

In the initial period since William Jones's declaration, it is evident that there was no clear understanding of a distinction between what later came to be called Indo-Aryan languages from the class of Dravidian languages. Among the traditional Sanskrit Paṇdits, there was a general belief that all languages other than Sanskrit were somehow derived from Sanskrit which was described by Daṇḍin as a Divine language (*daivī vāk*). This was evident from the usage of descriptive terms such as *tatsama* "words identical with those of Sanskrit," *tadbhava* "words (transparently) derived from Sanskrit," and *deśya* "regional" words whose derivation from Sanskrit was not transparent. This terminology was widely used not only to describe Prakrit and Apabhraṃśa languages which historically belong to the Indo-Aryan family, but also to describe the languages that belong to the Dravidian family. I have described elsewhere that in the traditional Mīmāṃsā belief, even the so called Mleccha "foreign" languages were also ultimately derived from Vedic Sanskrit. Early western scholarship after William Jones also went through a phase that did not know distinct origins for Indo-Aryan and Dravidian languages.

19th Century Views: Gauḍa and Drāviḍa Linguistic Areas

There is a traditional classification of Brahmins of India into two groups. The northern group consisting of five sub-groups is given the title Gauḍa, while the southern group consisting of five sub-groups is given the title Drāviḍa, for a detailed analysis, see Deshpande (2002). The five sub-groups coming under the term Gauḍa are: Sārasvata, Kānyakubja, Gauḍa, Maithila and Utkala. The five sub-groups coming under the term Drāviḍa are: Gurjara, Mahārāṣṭra, Tailanga, Karnāṭaka and Drāviḍa. The early state of linguistic understanding in the post-Jones period is seen in the discussions of these groups and sub-groups by Colebrooke. In his 1801 article "On the Sanscrit and Pracrit Languages," Henry Thomas Colebrooke brings up this classification in the context of describing the linguistic geography of India. Without a hint that this is a classification of brahmins, albeit in different regions of India, Colebrooke (1801: 226) generalizes this into a classification of the "Hindu nations":

> "The five Hindu nations, whose peculiar dialects have been thus briefly noticed, occupy the northern and eastern portions of India; they are denominated the five

> *Gaurs*. The rest, called the five *Dravirs*, inhabit the southern and western parts of the peninsula."

Colebrooke had changed the context of the general classification away from a classification of brahmins to a classification of "Hindu nations" based upon their affiliation with language and regionality. Here too, he detected certain contradictions. He had doubts about the appropriateness of the classification of the Gurjaras among the Draviḍas, and the classification of the Utkalas among the Gauḍas. He says (1801: 229):

> "Considering the situation of their country, and the analogy of language and writing, I cannot hesitate in thinking that the *Gurjaras* should be considered as the fifth northern nation of India, and the *Uriyas* should be ranked among the tribes of the *Dacshin*."

What is difficult for us to understand is the exact basis upon which Colebrooke is making these judgments, because, as Trautmann (1997: 147) points out: "He ... derives all the major Indian languages from Sanskrit, excepting only those known to have come from the invasions of foreigners."

The fact that Colebrooke moved this classification into the area of linguistic geography set the course for the future Indological use of this classification in the works of his successors, where a clearer recognition of major differences between Indo-Aryan and Dravidian language families becomes evident. As Trautmann's research shows, The second discovery, that of the Dravidian language family, is usually credited to a missionary, Bishop Robert Caldwell, whose classic work, *A Comparative Grammar of the Dravidian or South Indian Languages*, was published in 1856. ... This, however, is mistaken. Fully forty years previous to Caldwell's book, in the very year in which Bopp was laying the

foundations of the comparative study of Indo-European languages in Europe (1816), Francis Whyte Ellis, Collector of Madras, published an elegant proof of the Dravidian language family. He showed that Tamil, Telugu, and Kannada shared a common stock of roots and forms of grammar that were different from those of Sanskrit, a finding he extended also to Malayalam, Tulu, Kodagu, and 'Rajmahali' or Malto, a tribal language of the Gangetic basin, far to the north" (Trautmann 2005: xxiii). The work of Ellis, and more widely the work of Bishop Caldwell, influenced the evolving understanding of the different language families in India, and a new understanding of the terms Gauḍa and Draviḍa as language groups in India began to emerge. In Caldwell's work (1856, 1974: 56-57), we see a contrast set up between "Gaurian Idioms" and "Dravidian Idioms." The languages included under the heading *Gaurian* are Hindi, Bengali, Marathi, Gujarati, and Sindhi. Under the heading *Dravidian* are listed Tamil, Canarese, Tulu, Malayalam, Telugu, Toda, Kota, Gond, Ku, Rajmahal, Brahui, and Oraon. The departure from the original context in the direction of a language-classification, since the writing of Colebrooke, is so complete in Caldwell that there is no oddity felt in listing Marathi and Gujarati among the *Gaurian* group. The terms are undergoing a process of redefinition and recontextualization. We see the same process in Rudolf Hoernle's 1880 work *A Comparative Grammar of the Gaudian Languages*. Hoernle (*Introduction*, p. i) explains his choice of the term *Gaudian*: "I have adopted the term Gauḍian to designate collectively all North-Indian vernaculars of Sanskrit affinity, for want of a better word; not as being the least objectionable, but as being the most convenient one." Referring to the specific languages, Hoernle (ibid) says: "Seven languages of the Sanskrit stock are usually enumerated as spoken in North India, viz. Sindhi, Gujarati, Punjabi, Hindi, Bangali, Oriya, Marathi." The languages of

Maharashtra and Gujarat, coming under the old *pañca drāviḍas*, are now listed as "languages of the Sanskrit stock ... spoken in North India." There is a newly emerging notion of a linguistic divide between Indo-Aryan and Dravidian, and this divide is expressed by using the old terminology of Gauḍa vs. Drāviḍa.

Early Indian Responses to Indo-European Linguistics

By the second half of the nineteenth century, there were several theories and counter-theories circulating in India, for details see Deshpande 2005. The newly emerging class of western educated Indians was absorbing the theories of Indo-European philology and Caldwell's notion of the separate Dravidian family, and was reacting to these new ideas in various ways. Early nineteenth century scholarly figures like Sir R.G. Bhandarkar, who was trained in Bombay and Pune under European professors, completely agreed with the conclusions of Indo-European philology of the time, and began to offer explanations of the emergence of various languages in terms of contact between Aryan and non-Aryan populations in India. Bhandarkar's contribution toward an understanding of the Aryan origins may be seen most profoundly in his *Wilson Philological Lectures on Sanskrit & the Derived Languages* delivered in 1877 in Bombay, and published in the form of a book in 1914. Referring to the progress of Indo-European philology especially in Germany, Bhandarkar says: "The progress made within about fifty years is marvelous, and affords a striking instance of the intellectual activity of the Europeans. In the cultivation of Philology and the elaboration of this new science the Germans, of all other nations, have been most prominent, and have done by far the greater portion of the work," (Bhandarkar 1914:5). Bhandarkar's explanations built on the hypothesis of various

migrations, contacts, and adaptations are seen in the following discourse: "Though [the speakers of Pali] heard conjunct consonants and the diphthongs *ai* and *au* pronounced by the speakers of Sanskrit, as correctly as the other letters which they did not corrupt, their organs were not fitted to utter them. These peculiarities may have been natural or acquired. If natural, the people who first corrupted Sanskrit into Pali must have belonged to an alien race which came into close contact with the Āryas and learnt their language.... And there is another instance in History of an alien race having treated the sounds of the language of a civilized community in just the same way. The Barbarians who overran Italy and developed the Italian from the Latin, showed the same inability to pronounce the Latin conjuncts, and assimilated them as our Pali ancestors did," (Bhandarkar 1914: 47). The process of the emergence of the Prakrits is accounted for by Bhandarkar by referring to the migration of the Āryas from "the land of the five rivers" to "the country known afterwards as Brahmāvarta and Kurukshetra." This is the country about Thaneśvar, where "they formed a consolidated community in which an aboriginal or alien race was incorporated and the language represented by the Pali was the language of that race," (Bhandarkar 1914: 88). The idea of the Āryas, the speakers of Sanskrit, coming into contact with non-Āryas, and such a contact leading to a degenerative transformation of Sanskrit into Prakrits is an idea not inherently alien to the Sanskritic tradition. But the same tradition does not admit any notion of history for this divine and eternal language, and here Bhandarkar's efforts to find historical origins of and developments in Sanskrit did not go well with his contemporaries. These were departures from the Sanskritic tradition. If the speakers of Sanskrit were Āryas, and if Sanskrit itself resulted from a process of transformation from its Indo-European precursors

and underwent later transformations of its own, were the Āryas themselves subject to transformative processes? If the transformations of Sanskrit into Pali were caused by the alien speakers trying to learn the Aryan language, what was it that caused the transformations which resulted into the very existence of Sanskrit itself, and what caused transformations within the very history of Sanskrit? Such questions indeed raise unpalatable issues, and Bhandarkar's own wording suggests that he, as a Brahmin, was himself caught in the middle. Bhandarkar's wording would suggest a belief that the Āryas were not in contact with non-Aryans in "the land of the five rivers." Even admitting that the Indus Civilization was not excavated by this time, one still finds this belief difficult to accept, particularly in view of the fact that there are north western Prakrits in Aśokan inscriptions, a fact which was known to Bhandarkar by this time. Bhandarkar finds that the northwestern Prakrits like Paiśācī, "appear to be truly Aryan. Perhaps then this was the language of an Aryan tribe that had remained longer in the original seat of the race, and was connected with the ancestors of the Teutons, so as to develop a phonetic peculiarity resembling theirs, and emigrated to India at a very late period and settled on the borders. Or it might be that the tribe came to India along with the others, but living in the mountainous countries on the border in a sort of rude independence, it developed this peculiarity of pronunciation.... Since under this supposition they could not have come in very close contact with their more civilized brethren of the plains, their language did not undergo some of those phonetic modifications which Sanskrit underwent in the mouth of the aboriginal races," (Bhandarkar 1914: 94). So the speakers of northwestern Prakrits were truly Aryan, uncontaminated by contact with the non-Aryans, but not as civilized as the speakers of Sanskrit who did come in contact with the "aboriginal races"?

Bhandarkar seems to believe that the Aryans were not in contact with aboriginal races until they moved from "the land of five rivers" into the interior of India. Thus the linguistic deviations from Sanskrit in the direction of Pali and other Prakrits are caused by the contact of the Āryas with the non-Āryas, while the linguistic deviations from Sanskrit in the direction of the northwestern Prakrits and other Indo-European languages are to be explained by "isolation" at best. This creates an interesting tripartite division: the ethnically pure but less civilized Āryas of the northwest, the pure civilized Āryas of the "land of the five rivers," and the uncivilized non-Āryas of the rest of the Indian subcontinent.

Bhandarkar's student at Deccan College, B.G. Tilak (1856-1920) disagreed with Bhandarkar's moderate political views and reformist social views, but basically accepted the conclusions of Indo-European philology, with a twist of his own. His first publication on the subject of ancient history was the book *Orion or Researches into the Antiquity of the Vedas*, published in 1893. His second publication was *The Arctic Home in the Vedas*, published in 1903. His third and the last publication on the subject was the book *Vedic Chronology and Vedāṅga Jyotisha [Containing also Chaldean and Indian Vedas and other miscellaneous essays]*, written in 1913 in the Mandalay jail in Burma and published posthumously in 1925. Trying to find history in the *anādi* "beginningless" Vedas was a departure from the Brahmanical tradition, but such a departure, facilitated even though it was by the introduction of Western education, was the path chosen by Tilak.

Tilak was in basic agreement with Bhandarkar on the conclusions of Indo-European linguistic theory, and had particular admiration for the work of Max Müller. He viewed Max Müller not only as a great scholar of the Veda, but as someone who pointed out to the west the importance of the

spiritual contribution of India (cf. Tilak on Max Müller, *Lokmānya Ṭiḷakāṃce Kesarītīl Saṃkīṇa Lekh*, vol. 4, 1922, pp. 124ff. Also see Max Müller's obituary written by Tilak in *Kesarī*, November 6, 1900, ibid, pp. 573ff.). In his obituary of Max Müller in *Kesarī* (ibid, pp. 575-6), Tilak approvingly points out Müller's contributions to Indo-European philology and comparative mythology:

> "The efforts of the western philologists were given a new turn by their recognition of the ancient character of Sanskrit and their study of Pāṇini's general rules and their exceptions regarding the derivation of various types of words from stems and affixes. In the last thirty/forty years, German scholars have produced an entirely new *śāstra* 'science' of comparative philology. One must not forget that Pāṇini's work is the foundation of this new *śāstra*. ... The second consequence of the western study of languages was in the area of the study of religion. Before the birth of western philologists like Burnouf, Bopp, and Jones, the people in Europe were familiar only with one religious tradition that was born in the region of Palestine. ... This orientation of the western thinking on religion changed with their study of the Veda, Avesta, and the Buddhist Tripiṭaka, and with a great transformation of ways of thinking, the science (*śāstra*) of comparative religion was born. ... The notion that the civilized people in Europe and Asia must have originally belonged to the same human race and were speakers of the same original language gradually developed and was successively strengthened. It is necessary to understand this history to fully comprehend the true significance of Professor Max Müller's efforts, scholarship, and writings."

However, while Tilak admired Max Müller, he believed

that the purely philological approach of scholars like Max Müller was not sufficient to yield convincing results and that the astronomical method, though generally condemned by the philologists as being indefinite and unreliable, could be refined and used to make more exact predictions. In his own works based not so much on philology, but on astronomical evidence, Tilak argued that the ancestors of the Vedic Aryans, and possibly texts of the Vedas themselves came from the Arctic Home dating to a very ancient period of 8000 to 10000 BC. If one were to accept Tilak's dating of the Vedas and the ancestors of the Vedic Aryans, then the non-Sanskrit branches of Indo-European language family would all seem to be far younger than the Indo-Aryan branch. While this conclusion would make the Indian Aryans the senior, rather than junior, brothers of the colonial Western Aryans, and would boost the nationalist pride, Tilak did not systematically attempt to explain how he would derive all other branches of Indo-European from Sanskrit. Without explicitly claiming so, Tilak makes Sanskrit the oldest of all Indo-European languages, and hence a possible source of them all. As I have discussed elsewhere in detail (cf. "Arctic Home in the Vedas: Religion, Politics, and the Colonial Context," forthcoming), in spite of Tilak's political background, by the standards of the late 19th and early 20th century scholarship in the west, Tilak's geological and astronomical investigations had better scholarly foundations, than the openly Hindutva-motivated histories constructed by Savarkar, Golwalkar, and others.

However, in the nineteenth century Maharashtra, there was a continuing Brahmanical tradition that believed in the primordiality of Sanskrit and India as its homeland and holy-land, combined with a belief that all other languages were derived from Sanskrit through a process of degeneration (*apabhraṃśa*-ization). This goes back to Manu's Lawbook that all populations of the world ultimately originate from

the four primordial varṇas created by God in India, through mixing of the original varṇas and through migrations of various groups away from the Āryāvartic center combined with loss of dharmic behavior (*Manusmṛti*, chapter 10). Manu (10.43-44) lists Pauṇḍraka, Cauḍra, Draviḍa, Kāmboja, Yavana, Śaka, Pārada, Pahlava, Cīna, Kirāta, Darada, and Khaśa as original Kṣatriyas who slowly became Śūdras through loss of dharmic behavior and through non-contact with Brahmins (*kriyālopāt... brāhmaṇādarśanena ca*, Manu 10.43). This Brahmanical view, combined with the appropriation of modern knowledge of the Indo-European family and the emerging sense of Indian nationalism, appears in the works of authors like Narayan Pavgee, a contemporary of Tilak. While Tilak argued for the Arctic Home of the Vedic Aryans, Pavgee argued for the Āryāvartic Home of the Āryans, though he was willing to accept a theory that a branch of the Āryāvartic Aryans migrated to the Arctic region and eventually returned to India. With the Āryāvartic home of the Aryans, Pavgee was arguing against the notion that the Aryans came to India from outside. However, he was proposing that the Aryans spread across the world from the Āryāvartic home, and that Sanskrit was the mother of all languages of the world.

The second volume of his *Bhāratīya Sāmrājya* (1893) is titled: *Āryalok va tyāñce Buddhi-vaibhav* "The Āryan People and the Wealth of their Intelligence." The book begins with a section dealing with the original home of the Āryas (*āryāñce mūla-nivāsa-sthāna*). Pavgee asserts at the very beginning that the Vedas are the oldest literature of mankind, and that the Vedas support the notion that northern India is the original home of not just the Aryans, but of the entire mankind (Pavgee 1893: 2). The Aryan family of languages originated in India, Pavgee (1893: 5) asserts, and it expanded westward from India through the regions of Iran, Greece, Italy, Spain, England, Germany, and Russia. Pavgee mentions the view of western philologists that the Aryans came into India from outside, but he does not support this view. In the ninth volume of his *Bhāratīya Sāmrājya* (1900), titled *Bharatakhaṇḍātīl Nānāvidha Bhāṣā* "Various Languages in India," Pavgee has a section on the original land of the Ārya language, i.e. Sanskrit. Pavgee asserts unequivocally that Sanskrit originated in the region of Āryāvarta within India and is the mother of all Aryan languages. All languages such as Marāṭhī, Hindī, Bengalī, Gujaratī, Iranian, Greek, Latin, German, English, and Polish were born from Sanskrit. They are daughters of Sanskrit (Pavgee 1900: 14). Various originally Ārya groups left their religion and castes and left the original Ārya homeland, and these eventually became the various branches of the Aryan language family. In support of this conclusion, Pavgee offers, not linguistic arguments, but a large number of passages from Smṛtis and Purāṇas (1900: 16ff), a practice continued in nationalist history writing till today, see papers in Deo and Kamath (1993).

From Linguistic Reconstruction to Racist Theories in the west

Returning to the history of western scholarship during the nineteenth century and the early twentieth century, one needs to keep in mind one major factor, namely that the Indus Valley Civilization was discovered only in 1920s, and hence all previous scholarship of the Indo-European philology developed in the absence of any knowledge of the Indus Valley Civilization. While the discovery of the Indo-European language family was to a large extent a result of linguistic scholarship, the scholars who were engaged in this scholarship often used discourses that merged the distinction between language and ethnicity or race, (Day, 1994, Leach, 1990, and Trautmann 1997 and 1999). Beginning with

William Jones, we find the use of terms like "nations" to refer to groups speaking particular languages, and words like "Semitic" and "Hamitic" combined both language and ethnicity, (Trautmann 1997 and 1998). With this mixture of terminology, the notion of a linguistic ancestor for the languages of the Indo-European family soon developed into finding an ancestral group of people, a nation or a race, that over time splintered into multiple sub-groups and these migrated from an original homeland to their eventual destinations where we find the descendant languages today. Today one can say with confidence that there is no necessary connection between language and ethnicity. The African blacks who speak French are linguistically as much Indo-European as white French speakers in France, just as the English-speaking peoples across the world speak an Indo-European language, though they belong to different races and ethnicities. Thus, linguistic identities are not necessarily related to racial or ethnic identities. However, the language of race was pervasively used by scholars in the nineteenth and twentieth centuries. In his early writings, Max Müller used the word Aryan in racial meaning, even though he later recanted: "There are Aryan and Semitic languages, [but] it is against all rules of logic to speak, without an expressed or implied qualification, of an Aryan race, of Aryan blood, or Aryan skulls," Max Müller (1880, 4: 223). Edmund Leach (1990: 235) points out that by 1878 Max Müller was writing without equivocation about "the Aryans" as if they were a racial group moving outward from some central Asian homeland by a process of conquest. "By the 1890's, the linguist Sir George Grierson was explaining all Indo-Aryan dialect distributions in northern India as due to past military conquest, a view that was repeated without criticism in the 1969 printing of the *Encyclopaedia Britannica*," Leach (1990: 235). We see the same pattern in the works of leading

European scholars like Hermann Oldenberg. Consider the following narrative from Oldenberg (1896, 1973: 39):

> "In the ancient times for instance, the Aryans of the Northwestern part of further India had not yet entered deep into the borderland by the use of force and were still the brothers and almost neighbours of the Zarathustrian Aryas of Iran, or rather of the Aryans who were opponents of Zarathustra. The situation changed in later times. Hinduism spread all along the peninsula *with the Aryan character ever weakening, with the blood of the natives mingling in their blood stream in a never-ceasing continuity and with an infinite series of shades of complexion, ranging from the fair to the dark, observable in the populace.* ... It will not do to mix up the old times with the modern times."

Such passages can be multiplied a hundred times indicating how wide the use of the racial terminology was. The racial terminology took different forms, e.g. the Aryans versus Semites in Germany, while in the context of colonial domains like India, the racial terminology made the relationships between the white Aryan British and the black Aryan Bengali ever more complicated—sometimes positively, though most of the time negatively. Does this mean that one must not connect migrations of peoples to linguistic changes, for fear of involving ourselves in racialist thinking? I do not think so. Theorizing from where we stand today, we need to take into account all forms of human interaction that involves language to evaluate the phenomenon of linguistic relationships, genetic or otherwise, as well as phenomena like various forms of intensive and extensive bilingualism and diglossia. The social context of language in its widest sense needs to be taken into account to explain facts of language, without insisting that a linguistic identity must be

co-terminus with racial, biological, religious, or political identities. These different identities do indeed intersect, but do not logically entail each other. These various forms of identities do affect language use, and may be taken into account with due caution.

Historical Linguistics after the Discovery of the Indus Valley Civilization

With the discovery of the Indus Civilization in 1920s began a new effort to make sense of the Indo-European migrations and the Vedic texts. Early on, the destruction of the Indus cities was connected with the Vedic Aryans led by their God Indra destroying the forts of the Dāsas and Dasyus. If this version of history is accepted then Indus was pre-Vedic and non-Vedic and was destroyed by Vedic Aryans. This most likely makes Indus a non-Indo-European linguistic region, and hence for decades various scholars, like Emeneau and Parpola, argued for a Dravidian identity for Indus. This was also supported by the consideration that Brahui in Baluchistan is a Dravidian language, and further by the claim of David McAlpin that Dravidian and Elamite of ancient Iran may belong to the same language family. Even though gradually the opinion shifted to the position that the Vedic Aryans entered the Indus area after the Indus cities had already declined and abandoned, the predominant linguistic opinion still held that the Indus Valley was a Dravidian speaking region. Decipherments of the Indus Seals by S.R. Rao and Madhusudan Misra, among others have claimed a form of proto-Sanskrit as the language of Indus, and the Vedic character of Indus civilization, though there is not a wide acceptance of these proposals, cf. for a review of recent proposals, see: Ratnagar (1996), Witzel (2002) and Mahadevan (2002). More recently scholars like Michael Witzel have suggested that the Indus area was most likely a

multi-lingual multi-ethnic region that may have included Dravidian, proto- or para-Munda, as well other languages (related to isolates like Burushaski), including forms of Indo-Iranian on the periphery. This suggestion seems to be most realistic to me, as it allows an open-ended examination of all available linguistic data.

As for the latest twist on the decipherment of the Indus seals, Farmer-Sproat-Witzel (2004) proposes that the Indus seal symbols do not codify a language: "Archaeologists have long claimed the Indus Valley as one of the four literate centers of the early ancient world, complete with long texts written on perishable materials. We demonstrate the impossibility of the lost-manuscript thesis and show that Indus symbols were not even evolving in linguistic directions after at least 600 years of use. Suggestions as to how Indus symbols were used are noted in nonlinguistic symbol systems in the Near East that served key religious, political, and social functions without encoding speech or serving as formal memory aids. Evidence is reviewed that the Harappans' lack of a true script may have been tied to the role played by their symbols in controlling large multilinguistic populations; parallels are drawn to the later resistance of Brahmin elites to the literate encoding of Vedic sources and to similar phenomena in esoteric traditions outside South Asia (Abstract, p. 19)." While a nonlinguistic interpretation of Indus symbols is a distinct possibility that needs to be taken into account, the initial reactions to the above proposal from scholars do not seem to indicate a wide acceptance. In any case, whether because the available attempts to decipher the linguistic value of Indus symbols have all failed to reach a convincing result, or because they are intrinsically nonlinguistic symbols, so far the symbols of Indus do not directly contribute to our linguistic understanding of history, which must be teased out only from an intensive mining of

linguistic sources such as the Vedic and Iranian texts, and this brings us back to the work of scholars like Emeneau, Burrow, Kuiper, Mayrhofer, Southworth, Witzel, Parpola, and Lubotsky, among others. The substratum languages in the area covered by the Indus Valley Civilization probably include Dravidian, (Para-) Munda, as well as ancestors of linguistic isolates like Burushaski, plus some traces of the languages of the Bactria Margiana Archaeological Complex, as well as early forms of Iranian and Indo-Aryan in the border areas. Southworth (2005: 328-9) says: "The Indus language (group) is probably the oldest detectable linguistic stage, both in Panjab and Sindh. An unidentified western Austro-Asiatic language designated as Para-Munda probably functioned as a *lingua franca* of this area. Both of these language groups may have been present as early as the seventh or eighth millennium BC, when archaeologists record the beginnings of agriculture in areas bordering the Indus Valley. Indo-Aryan appears in the form of Vedic Sanskrit, dateable to the early second millennium BC, probably preceded by outer Indo-Aryan. The arrival of Dravidian-speaking people in the area is difficult to date and is the subject of some controversy. Evidence of Dravidian borrowings in the Rigveda dates only from about 1200 BC, according to some sources, yet it is nevertheless possible that Dravidian languages were spoken in Sindh and Saurashtra (and perhaps even in Panjab) considerably earlier. Ultimately, only Indo-Aryan survives in these areas, though Sindh shows traces of outer Indo-Aryan." Also noteworthy are Witzel's two 1999 articles "Substratum Languages in Old Indo-Aryan" and "Early Sources for South Asian Substrate Languages," as well as the forthcoming article "The Languages of Harappa."

New Linguistic Approach in Mid-20th Century: "India as a Linguistic Area"

The most significant development of the middle of the twentieth century linguistic study of India was the idea of "India as a Linguistic Area" seen in the early works of Murray B. Emeneau and F.B.J. Kuiper, and eventually consolidated in the work of Nicholas Masica. Until the emergence of the notion of Linguistic Area, the only dominant model was the genetic model used in Indo-European and other forms of historical linguistics. The genetic model explains the common elements between genetically related languages as being a reflection of common ancestry. Where the genetically related languages differ, those differences may have developed either internally in those branches, or they may be due to contact with other languages of different regions etc. But what about a demonstrably large number of common features shared by languages that evidently do not belong to the same language family? Where do these features and their commonality originate? The new direction proposed by areal linguistics was that diffusion of linguistic features across genetically unrelated languages can occur through intense and prolonged contact. Given sufficient intensity of contact and depth of time, genetically unrelated languages of a given geographical region begin to exchange phonetic, syntactic, and other features with each other, and over time develop a significant set of such shared features. The research work of Emeneau, Kuiper, Masica and others has demonstrated how this process occurred in the Indian subcontinent so that languages belonging to different families like Indo-Aryan, Dravidian, and Austro-Asiatic came to share a large number of common linguistic features through diffusion, rather than common ancestry. Thus, genetic relationships between languages as well as processes of diffusion among languages of a given linguistic area are all working simultaneously to produce

the resulting state of a language or languages, and these different strands in the make-up of languages need to be analytically separated in order to get a proper sense of linguistic history. Franklin Southworth (1974) had previously used the term "linguistic stratigraphy" for this sort of linguistic analysis, and his recently published book (2005) calls it "linguistic archaeology," where he discusses how one can begin to peel off or dig into various layers of features acquired by a language or languages.

By the beginning of the second half of the twentieth century, especially with the researches of scholars like Emeneau, Burrow, and Kuiper, who added serious consideration of Dravidian and Austro-Asiatic languages and their co-existence in the Indian subcontinent with languages of the Indo-Aryan branch of the Indo-European family, many issues were newly brought into a sharper focus. In his 1975 article "Substratum Influence on (Ṛg-Vedic) Sanskrit," Hans Hock conveniently summarizes the conclusions of this research (p. 76-78):

> As is well known, the South Asian subcontinent today constitutes one of the paradigm cases of linguistic convergence: Three major linguistic families of distinct origins (Dravidian, Indo-Aryan, and Munda), as well at least one language isolate (Burushaski) have merged into a sprachbund which further extends into the fringes of the neighboring Iranian and Tibeto-Burman language families. This sprachbund (= linguistic area) is characterized by an impressive array of shared features which are found throughout most or all of the individual sub-dialects of the area and which include a contrast between dental and retroflex segments [for example, *t*, *th*, *d*, *dh*, and *n*, versus *ṭ*, *ṭh*, *ḍ*, *ḍh*, and *ṇ*], a prevailing SOV (= Subject-Object-Verb) sentence structure, and the phenomenon of a 'cumulative' extended sentence structure characterized by the tendency to limit the occurrence of finite verbs to the rightmost clause; while all preceding (non-relative) clauses have the verb appear as a non-finite 'absolutive.' Considering the massiveness of this present-day convergence, it is only natural to assume that it must be a result of centuries, if not of millennia, of quite intimate bilingual contact. And it is equally natural to speculate on the period when the developments leading to his convergence must have begun. In terms of the history of Indo-Aryan, did they begin at the time of the earliest extant texts, the Vedic Saṃhitās, especially the oldest among them, the *Ṛg-Veda*? Or did they take their course only in a later, post-Vedic period?
>
> It is natural to speculate on the direction of the convergence in its early stages. Was it a mutual convergence, as it is usually encountered in present-day India? Or was it mainly a unidirectional convergence comparable, say, to that between Czech and German?
>
> ... As early as 1833, Pott considered the dental/retroflex contrast of Sanskrit at least partly due to the influence of the 'autochthonous' languages (78), later specifying these as Dravidian (1836: 19, 453). In 1856, Caldwell made similar claims (38). As time progressed, the number of linguists subscribing to this view and adding other features of (Ṛg)Vedic or post-Vedic Sanskrit considered the result of Dravidian influence steadily increased.
>
> In 1921, Przyluski added another possible source for some of these phenomena, namely Munda. Levi (1923) added further weight to the assumption that Munda at one time must have been very influential in the South Asian area. As a consequence, it was for some

time considered possible that Munda, as well Dravidian, may have contributed to the specifically "Indian" features of Sanskrit (such as the dental/retroflex contrast); cf. e.g. Bloch (1934: 53-4). As a matter of fact, Pizagalli (1929: 165-7) believed that only the Munda languages could be the source for Indo-Aryan retroflexion. In the more recent literature, however, the influence of Munda is considered to have been minimal at best, Dravidian being cited as the only probable source language; cf. e.g. Emeneau (1956, 1962a, 1974), Kuiper (1967a).

There is thus a long tradition of explicitly or implicitly answering the question concerning the beginning of the South Asian convergence to have been pre-Vedic (since the dental/retroflex contrast occurs already in the earliest, Ṛg-Vedic texts). Moreover, at least for the early, Vedic period, there is a tacit agreement that the convergence was unidirectional, from Dravidian (or Munda) to Sanskrit. At any rate, except perhaps for the area of vocabulary, no attempt seems to have been made to identify any instances of early convergence in the opposite direction.

This view, however, has not remained unchallenged. There has been a small, but constant flow of linguistic opinion according to which, especially in view of our present ignorance about the full linguistic panorama of early India, it is hazardous to attribute convergence only to a Dravidian (and/or Munda) substratum: There may have been other languages which could have been the source for at least some of the phenomena, cf. e.g. Bloch (1929: 731-2, 1934: 322-4), Mayrhofer (1953: 233-4), Thieme (1955: 436-48). In light of the fact that even today we find the isolated Burushaski in the South Asian sprachbund, this

cautionary attitude seems to be justified.

Some linguists even have completely rejected the hypotheses advocating early substratum influence, and have claimed that the developments in question can be accounted for as native, without any need for assuming an out-side, non-Indo-Aryan substratum; cf. e.g. Bühler (1864), Bloch (1925: 16, 29).

Finally, other linguists, accepting the view that (some of) the phenomena in question can be accounted for as regular, native developments, proposed that at most, the substratum language(s) accelerated or 'helped' these developments; cf. e.g. Konow (1903: 455, 1906: 279), Bloch (1929: 723-4, 1934: 53-4) (thus changing his earlier, 1925 view), Burrow (1955: 95-6).

I have quoted Hock's account at length to illustrate the complicated history of these arguments and to show approximately where these arguments stood in 1975. For an updated review of this discussion, see Hock (1996). The discussion makes it clear that there is no scholar at this time seriously arguing for the indigenous Indian origin of Aryans or Indo-Aryans whose views need to be included in such a survey of linguistic scholarship. Secondly, there is greater awareness of the increasing complexity of linguistic arguments as one begins to take into account questions of language contact, bilingualism, convergence, diffusion of linguistic features, formation of sprachbund or linguistic area, etc. Besides the question of the origin of retroflex consonants in Indo-Aryan as possibly due to language contact and convergence with Dravidian and/or Munda languages, Hock (1975) also discusses other features possibly due to diffusion:

Vocabulary items: For example, *mīna* 'fish,' *ulūkhala* 'mortar,' *mayūra* 'peacock' from Dravidian, and words like *lāṅgala* 'plough' from Munda.

Absolutives: Constructions of the type *kuṇḍaṃ kṛtvā devadatto 'pibat* 'having made the pitcher, D. drank'. Such constructions are generally considered the result of Dravidian influence.

Participles as finite verbs: This indicates the increasing use of constructions like *devadattena kuṇḍaṃ kṛtaṃ*, besides the finite verb construction *devadattaḥ kuṇḍam akarot*. This is earlier attributed to Dravidian influence.

Nominal Style: The nominal sentences in Sanskrit as well as the tendency of the increasing length of the nominal compounds has been attributed to Dravidian substratum in earlier discussions.

SOV sentence order: The subject-object-verb order of Sanskrit, in contrast with the western Indo-European languages, is explained on the assumption of Dravidian substratum.

Quotative *iti*: The tendency of Sanskrit to signal the direct discourse by postposing the particle *iti* has been attributed to Dravidian substratum.

Āmreḍita compounds: The repetitive use of words in the sense of "every x" in passages like *svaṃ svaṃ caritraṃ śikṣeran* has been claimed to be a result of substratum influence.

Use of *api* : The various uses of *api* have been claimed as a result of Dravidian substratum influence.

Caste terminology and usage: Emeneau (1974) claims that the pattern of making derived feminines from masculine caste names like *kumbhakārī* from *kumbhakāra* 'potter' is due to Dravidian substratum.

One should note that the listing given above is simply to indicate the kinds of arguments that were proposed by various scholars by this time and not to suggest that there was a complete consensus among scholars on all or any of these proposals. Around this time, in fact, one notices more

proposals from Emeneau and Burrow regarding Dravidian substratum influence, from Kuiper regarding Munda influence, and scholars like Thieme indicating their doubts about many of these proposals for Non-IE sources of influence and counter-suggestions for internal development of many features within specific branches of Indo-European, without the necessary assumption of external influences. Hans Hock himself, after a detailed examination of evidence in his 1975 and other publications, expresses a more cautious approach to suggestions of substratum influence: "Perhaps the most important argument against a Dravidian origin of features in question, especially in Ṛg-Vedic times, is the fact that there is not only no conclusive, independent evidence for early Dravidian/Indo-Aryan contact, but that on the contrary there is independent evidence for early contact between Indo-Aryan and another non-IE-language (which is generally considered not to be a likely source for these features), namely Munda. This casts considerable doubt on the common assumption of early Dravidian/Indo-Aryan contact and the convergence it is generally assumed to have entailed. ... Finally, it is by no means certain whether Proto-Dravidian did in fact, as is generally assumed (at least implicitly), antedate the arrival of the Indo-Aryans. While it is thus unlikely that there was early convergence of Indo-Aryan with Dravidian, this should not be understood to imply that there proof against such a convergence", Hock (1975: 113-4).

Migrations, Language Contact, Bilingualism, and Dialect Geography

Assuming the mainstream view of Indo-European linguistic theory, several problems concern us regarding the probable migrations of Aryans and about the identity of the non-Aryans they most likely met in India and before reaching India proper. Hoernle (1880: xxx-xxxii) postulated the existence

of two early Aryan groups in North India, the Magadhan and the Sauraseni, representing two waves of Indo-European language speakers, of which the Magadhans were the older. This idea was supported by Grierson (*Imperial Gazetteer of India*, Vol. 1, pp. 353-59) and given an ethnological footing by Risley (1915: 55). Oldenberg also supported and elaborated this idea and pointed out that "probably the first immigrants, and, therefore, the farthest forward to the east ... are those tribes ... the Aṅga and Magadha, the Videha, the Kosala and Kasi." He (1890, 1882: 9) also claims that it was the second wave that produced the Vedas. This theme has been linguistically upheld by Meillet who shows that the Vedic dialect, like the Iranian, is an *r*-only dialect in which the Indo-European **l* merged into *r*, but the dialect of the redactors of the Vedas was an *r*-and-*l* dialect, where the original Indo-European **r* and **l* were retained; the redactors of the Vedic texts have put this *l* back into some of the Vedic words, where the original Vedic dialect had an *r*, Meillet (1912-13); Bloch (1970: 2). In later Prakrits we clearly see the eastern Prakrit, Magadhi, developing into a pure *l*-only dialect; whereas the western and particularly the northwestern dialects, almost devoid of *l*, represent the early *r*-only dialect, (Mehendale 1948: 297). For more recent studies of Vedic dialects and possibility of multiple migrations of Indo-Aryans speaking slightly varying dialects, see: Parpola (1988) and (2002), and Witzel (1989).

We should explore the difference between the *r*-only dialect, the *r*-and-*l* dialect (and possibly an *l*-only dialect) further. Burrow (1972) provides a perceptive analysis of this issue. He (1972: 535) says that "the *r*-dialect prominent in the early Ṛgveda shares a common change (of *s* > *ś*) with Iranian. It is unlikely to have undergone this change independently and consequently we must assume that it took place when a group of Indo-Aryan migrants were still in

contact with Iranians. ... On the other hand, those Indo-Aryans who preserved the distinction between *r* and *l* had already departed to India, and so they were unaffected by it. The speakers of the *r*-dialect were the latest comers on the Indian scene and there ensued a mixture of the two dialects." This is an important proposal. This suggests that there was a branch of Indo-European, which like the parent Indo-European had retained the distinction between *r* and *l*, and that this branch came into the region of Iran and later into India before the migrations of the standard Indo-Iranian branch.

Burrow's 1973 article titled "The Proto-Indoaryans" allows a further refinement of his ideas. In this study, Burrow proposes that there was a common Indo-Iranian homeland of the Proto-Aryans in northern Iran. He suggests that ancestors of Iranians and Indo-Aryans lived together in this common homeland. Then at first there was a southward migration of the ancestors of the Indo-Aryans, or Proto-Indo-Aryans. The Proto-Indo-Aryans spread both eastward to India and westward toward the Near East. Then came the second southward migration, that of the Proto-Iranians. The migration of the Proto-Iranians split the Proto-Indo-Aryans from their Western branch, those who are eventually represented in the Mitanni documents. In this scenario, all the three groups, the Proto-Iranians, the Western branch of the Proto-Indo-Aryans, and the Eastern branch of the Proto-Indo-Aryans represent the *r*-only dialects of common Indo-Iranian heritage. The Eastern branch is represented in the Ṛgvedic Aryans. The Western branch of the Proto-Indo-Aryans represented in the Mitanni documents is also an *r*-only dialect. This is clear from the following examples cited by Burrow (1973: 123) and Parpola (1988: 196):

Epithets of horses

Mitanni	Vedic
papru-nnu or *babru-nnu*	*babhru-* 'brown'
pinkara-nnu or *binkara-nnu*	*piṅgala-* 'reddish brown'
paritta-nnu or *baritta-nnu*	*palita-* 'gray'

In these examples, the Mitanni-Aryan dialect has *r* even where the Vedic words have an *l*. How about the *r*-and-*l* branch of Indo-European which presumably reached India before the Ṛgvedic Aryans? Where did they come from? Did they reach India via Iran? If so, did they leave any trace of themselves in Iran? Were the speakers of the *r*-and-*l* dialect of Pre-Vedic Indo-Aryans a totally different branch from the Indo-Iranian? These are difficult questions. Parpola (1988: 247) suggests: "The change *l* > *r*, which characterizes the common protolanguage of the Ṛgvedic and Avestan, seems to have taken place relatively late in Proto-North-Aryan, since it has not reached peripheral dialects, including Ossetic and a number of Pamir dialects within East Iranian. Several etyma suggest that Proto-Nuristani retained the original PIE *l*; others attesting to the change *l* > *r* are probably early loan words from Proto-Dardic (i.e. Proto-Ṛgvedic). The nearly 1,900 Iranian proper names in the Persepolis tablets contain possible traces of an *l*-retaining dialect in western Iran in the early fifth century B.C." Anyway, one still would have to assume the entry of the *r*-and-*l* dialects of Indo-Aryans into India before the arrival of the Ṛgvedic Aryans to account for the fact that *r*-and-*l* dialects in India were more easterly in relation to the Ṛgvedic dialect.

This poses many complicated problems in our understanding of the contact and/or convergence of Aryans with non-Aryans in different parts of India, and outside of India. One thing seems to be clear. The contacts with non-Aryans outside of India did not lead to retroflexion either in

the Indo-Iranian dialects, or in the pre-Indo-Iranian (*r*-and-*l*) dialects. The retroflexing influence was manifest in India. Even here it is manifest more in the eastern parts of north India than in the northwestern parts. Is it because there was less intense contact and/or converegence in the northwest? Or, is it because the non-Aryans in the northwest did not have retroflexion in their speech?

We may also refer to the problem of the origin of the retroflex sounds ḷ and *ḷh* for intervocalic *ḍ* and *ḍh* in Śākalya's recension of the *Ṛgveda*, the only recension that has survived to the present day. We hear of other recensions of the *Ṛgveda* such as those of the Māṇḍūkeya, Śāṅkhāyana, and Bāṣkala schools, but they are now extinct. Most scholars take for granted the existence of these sounds in the *Ṛgveda*. I disagree with this view. I think that like other eastern retroflexes, *ḷ* developed when the Ṛgvedic recitational traditions moved eastward in North India. Evidence to support this possibility comes from inscriptional Prakrits. Mehendale (1948: 11) points out that, in inscriptional Prakrits, the "change *-ḍ-* > *-ḷ-* occurs in the non-Western groups," illustrated by the regional alternation of *eḍaka* and *eḷaka*. This shows that the change of *-ḍ-* to *-ḷ-* did not occur in the northwestern regions of India at the time of Aśoka. Pāṇini, who comes from the northwest and precedes Aśoka by about two centuries, does not have the sound *ḷ* in his Sanskrit. His rules concerning the Vedic language do not have any indication of the existence of the sound *ḷ* in the Vedic texts known to him. In fact, in his rules like P.6.3.113 (*sāḍhye sāḍhvā sāḍheti nigame*) and P.8.3.54 (*iḍāya vā*), he refers to Vedic usages such as *sāḍha* and *iḍā* without *ḷh* and *ḷ* for the intervocalic *ḍh* and *ḍ*. Pāṇini obviously knew Śākalya's Ṛgveda, and hence it is surprising to find him not recording the existence of *ḷ* in that text. Thus, even though we reconstruct these retroflex *ḷ* sounds in Proto-Dravidian, this sound does not manifest first in the

northwestern Indo-Aryan. This indicates that even if we assume the Indus-Valley speakers to be Dravidians of some sort and that a contact and/or convergence with them occurred in the northwest, it does not seem to have led to massive retroflexion in that region. The massive retroflexion appears in the central and eastern parts of north India, and then in the South.

We cannot deny that the incoming Aryans came in contact with certain non-Aryan people in India. There is ample evidence for such contacts. Emeneau (1974: 93) not only proposes that there was "extensive bilingualism," but that "Sanskrit was handed down at some early period by a majority of speakers who learned it as a second language, their first language being Dravidian. "However, it is impossible to believe that majority of the composers of the *Ṛgveda* had Sanskrit as their second language and had some Dravidian language as their first language. This does not contradict the existence of several words in the *Ṛgveda* which can only be explained as loan words from Dravi- dian and Munda languages. The loan words do indicate contact with non-Aryan peoples. However, even if one accepts the entire lists of Ṛgvedic loan words provided by Kuiper, Burrow, and Southworth, the total number of these words in the *Ṛgveda* is still not as great as the number of Indo-Aryan loan words in Tamil or in Southeast Asian languages. Neither the Southeast Asian languages nor the British English pick up retroflexion, in spite of borrowing a very large number of words from retroflexed languages.

Ananthanarayana (1970: 66) basically accepts the concept of bilingualism as proposed by Emeneau and Kuiper, but derives a slightly different conclusion: "It is suggested that in the first period of this contact bilinguals were recruited chiefly from the native population. Support for such an assumption is provided in the greater number of Sanskrit

loans (in Dravidian languages) as opposed to an insignificantly small number of Dravidian words in Sanskrit." This would mean that more Dravidians accepted Aryan words than Aryans accepted Dravidian words. This also suggests that the initiative for adoption was more prominent on the part of the native non-Aryan than on the part of the incoming Aryan. Thus, to account for retroflexion in Indo-Aryan, it is necessary to assume that a large number of speakers of Indo-Aryan were native Dravidians, rather than Aryans influenced by Dravidians as assumed by Kuiper (1967). Kuiper himself (1958: 351) says that foreign words were "Sanskritized" in the process of being incorporated into Sanskrit: "Sanskritization of foreign words by substitution of *tr*, *dr* (or *rt*, *rd*) for *ṭ*, *ḍ* is well attested in the classical language." He (1958: 352) carries this tendency farther back into the Ṛgveda: "The explanation of *kartá-* as a Sanskritization of *kāṭá-* would seem to be rather the only one that is phonetically admissible according to our present knowledge." If one accepts Kuiper's explanation of *kartá-* < *kāṭa-*, which is by no means certain, it would appear that the Ṛgvedic Aryans did think of *rt* as being more native to the Aryan tongue, and *ṭ* as being somewhat foreign.

Emeneau did recognize this problem. Instead of saying that Aryans interpreted allophones of Proto-Indo-Aryan in terms of the foreign Dravidian phonemic system, he considered it more logical to assume that Dravidians interpreted allophones of Proto-Indo-Aryan in terms of their native phonemic system in the process of adopting the foreign Aryan language. In his excellent paper "Bilingualism and Structural Borrowing," as early as 1962, Emeneau (1962a: 434) points out that "the evident Dravidianization of Sanskrit in some of its structural features must lead to the partial conclusion that a sufficient number or proportion of certain generations of Sanskrit speakers learned their Sanskrit from

persons whose Dravidian linguistic traits were translated into Indo-Aryan and who provided the model for succeeding generations."

In his 1962 article, Emeneau proposed an essentially correct sociolinguistic process for the development of retroflexion in Sanskrit, but he was not sure of the exact chronology or of the intensity of this process with reference to the early Vedic texts. Were Dravidians participating in a significant proportion in the use of Sanskrit in pre-Vedic times? In 1962 Emeneau (1962a: 434) was not sure. In 1974, making essentially the same sociolinguistic argument, Emeneau (1974: 92) claims more confidently that such a process must have taken place before the composition of the *Ṛgveda*, and agrees with Kuiper that retroflexion in the existing Ṛgveda is an indication of pre-Ṛgvedic Dravidianization of the Aryan language.

In order to be able to evaluate the arguments put forward by Emeneau and Kuiper to establish "bilingualism" between the Vedic Aryans and Dravidians, we must take into account the analysis of bilingualism by Nadkarni (1975: 681), who points out that "structural borrowing at all levels of language, including syntax (the so-called 'deepest' level), can take place irrespective of the factor of social prestige, but solely as a consequence of 'intensive and extensive' bilingualism with a certain time-depth.... By 'extensive' bilingualism, I mean a situation in which bilingualism is coextensive with the entire community, as in the case of K[annad] S[arasvat] K[onkani] speakers. By 'intensive' bilingualism, I mean a situation in which a community whose mother tongue is language A is not merely conversant with language B, but actually uses it for a wide range of purposes in the course of normal, everyday living. Extensive bilingualism, in particular, seems necessary for structural borrowing to be stabilized, since it renders all the members of the community more or less equally receptive

to influences and traits of the non-native language—which, first randomly, and gradually more and more regularly, find their way into their mother tongue. A linguistic innovation has a strong chance of stabilizing itself in a language if it attracts no notice, and therefore no resistance from speakers, particularly in the early stages. This is possible only in situations of extensive bilingualism." Kuiper's data, as well as the loan word data pointed out by Southworth, indicate "sporadic" bilingualism, but are insufficient to indicate extensive or intensive bilingualism as defined by Nadkarni. I am pleased to report that Emeneau (1981: 469) agreed with my suggestion that retroflexion in the existing recension of the *Ṛgveda* needs to be explained more in terms of an increasingly Dravidianized oral transmission of the text, rather than in terms of this trait being part of the language of the original composers.

More Recent Developments: Emergence of "Out-of-India" Arguments

This is approximately where the linguistic debates stood by the end of the 1970s and 1980s. There was hardly an indigenous Aryan argument from linguistic angle to be seen in the available literature. The papers presented at the 1976 conference held in Ann Arbor, Michigan, on the theme "Aryan and Non-Aryan in India" (published in 1979) explore various linguistic questions such as "Aryan and Non-Aryan Elements in North Indian Agriculture" (Masica), "Linguistic Prehistory: The Dravidian Situation" (McAlpin), "Lexical Evidence for Early Contacts between Indo-Aryan and Dravidian" (Southworth), and "Genesis of Ṛgvedic Retroflexion: A Historical and Sociolinguistic Investigation" (Deshpande). While each of these studies explores various dimensions of the interaction between Aryan and Dravidian language groups, they do not question the basic tenets of

Indo-European philology, and the need for the assumption of the migration of the Indo-Aryan branch into the Indian subcontinent. The "alternative" view of Indian origins of Aryans is more or less absent at this time.

The situation seems to have changed by the beginning of the 1990s. George Erdosy had organized a conference in October 1991 in Toronto on the topic of "Archaeological and Linguistic Approaches to Ethnicity in Ancient South Asia" (papers published in 1995 under the title: *The Indo-Aryans of Ancient South Asia: Language, Material Culture and Ethnicity*, ed. by Erdosy). Papers at this conference indicated an emerging divide between some archaeologists (cf. Shaffer and Lichtenstein) who stressed the purely indigenous development of South Asian civilization and downplayed the role of linguistic arguments, and linguists and philologists like Deshpande, Southworth, and Witzel who argued that the linguistic arguments for separate language families arriving and converging in South Asia need to be understood in better ways, than be discounted. Deshpande argued for the careful separation of ethnic, linguistic and cultural groups and deplored their loose identification with archaeological assemblages. Witzel stressed that images of mass migration may have originated in the 19th century, but exist today principally in the minds of archaeologists and polemicists. He pointed out the outmoded models of language change, as well as overreactions to them (by denying the validity of ANY migrational model) by both archaeologists and Hindu nationalist writers, who continue to uncritically use the late Epic and Puranic materials to refute the linguistic arguments dealing with a far more ancient period.

Interestingly, during the same year, July 1991, a seminar on the "Aryan Problem" was organized at Bangalore by the Mythic Society of Bangalore and the Bharatiya Itihasa Sankalana Samiti of Pune, and the papers delivered at this

seminar were published from Pune in 1993 by S.B. Deo and Suryanath Kamath. This volume presents a complete contrast with the previously mentioned volume of papers from the 1991 Toronto conference. The majority opinion in the Bangalore conference volume is in the direction of completely rejecting the Aryan migration theory. Many of these papers appropriately point out the colonial motivations of many founding fathers of Indo-European philology. However, they fail to recognize that the Indo-European theory also went counter to many deeply held religious doctrines of Christianity and traditional European notions of ethnic identity, and became a catalyst in a transformation of European study of language and religion, and that on purely objective linguistic grounds much of the edifice of Indo-European linguistics is still standing undamaged and unrefuted. Mehendale's paper in this volume, "The Indo-Aryans, the Indo-Iranians and the Indo-Europeans," is the only paper that exhibits a strong academic foundation and gives a detailed summary of linguistic arguments describing these phases of Indo-European migrations, but the same cannot be said of other papers in this volume. While many papers (e.g. Waradpande and Wakankar) in the volume spare no effort to reject Indo-European linguistics and notions of migrations into India, there is no objective historical basis offered for the claims of Sanskrit being the mother of not only Indo-Aryan, but all Indo-European, and indeed of all languages. For example, consider the following paragraph from Waradpande's article ("Fact and Fiction about the Aryans," p. 19): "The disapproval of Śiśnadevas in two verses is not disapproval of phallus-worship, but of the practice of playing with the penis, as explained by Sāyaṇa. Linguistically also, a phallus-worshipper would be called Liṅgapūjaka and not Liṅgadeva. The Liṅgapūjaka is never called Liṅgadeva." A few minutes spent with the Vedic Word Indices published

by Vishvabandhu would show that the sole form *pūjita* from the root *pūj* occurs for the first time only in the Khilas of the *Ṛgveda*, and in no other Samhitā text, and similarly the form *liṅga* is completely absent in the Vedic Samhitās. Such is the historical integrity of Waradpande's arguments.

"The Aryan Problem: A Linguistic Approach" by R.P. Arya rejects any possibility of Indo-Europeans colonizing India, but asserts: "This forms a strong *prima facie* evidence enough to dispel the suppositions of modern philologists that identify Sanskrit as contemporary to her alleged sister languages of Indo-European family and accord her a high antiquity to be termed as the oldest known language of the world that formed or lent the idiom at least, to all the Indo-European languages that belonged either to the Semites or the Aryans. It seems that when the most exalted and advanced Vedic language had taken shape in India, the Semitics in Europe and rest of Asia were in a process of forming their language. And it seems more likely that the half-formed idiom of their language reached its completion at the hands of the Aryans who left their homeland several times to colonise the alien lands. ... The Indian sacred books contain accounts of many emigrations from India in all directions" (p. 54). Any elementary textbook of linguistics would clarify that "Aryan" and "Semitic" are two unrelated language families. Such arguments are a clear throw-back to the nationalist linguistics of N.B. Pavgee at the beginning of the 20th century.

The names of Satya Swarup Misra, Madhusudan Mishra, N.S. Rajaram and Shrikant Talgeri are absent from the list of participants in the 1991 Bangalore conference on the "Aryan Problem," and yet the next decade in India comes to be dominated by the appearance of these writers of the indigenist Aryan school. To this list one should also add the writings of Subhash Kak. Subhash Kak in his 1994 article "On the Classification of Indic Languages" concludes with these words: "The structural relationships amongst the Indo-European family of languages are well known. Not equally well known are the structural connections between the Indo-Aryan, the Dravidian and the Munda languages. These languages may be said to belong to the Prakrit family of languages. We use the label 'Prakrit' since it has been traditionally used to describe all Indian languages. In other words we argue that in general one might speak of membership of a language of more than one family. We believe that such a usage is more accurate than the term 'linguistic area' used earlier by Emeneau (p. 193)." Kak misses the significant difference between the opposite historical processes involved in the concepts of a "language family" and "linguistic area." The notion of a language family implies that languages B and C are branchings of a common ancestor A, and this fact of a genetic connection accounts for certain shared features. On the other hand, the notion of a linguistic area implies that languages A and B, though belonging to different language families and originally possessing different linguistic features come to share some of each others features over a long period of time through intense contact. Thus, shared common features of languages are a result of at least these two rather distinct processes. But then Kak asserts: "The evolution of the Prakrit family over millenia through prolonged interaction of the populations explains structural as well as biological commonality. The attested migrations of the Indo-Iranians into Europe explains the presence of several Dravidian features in the European languages (p. 193)." The project here appears more like building a primordial language family out of historically unrelated and yet closely interacting linguistic groups, analogous to concepts like nation-building in countries like India. "Linguistic Area" becomes "Family" for Kak.

By the time I organized the second conference on the

theme of "Aryan and non-Aryan in South Asia: Evidence, Interpretation and Ideology" in Ann Arbor, Michigan in October 1996 (the proceedings published in 1999), the presence of the indigenist Aryan school or the Out-of-India theory in the literature was loud enough to be taken into account. In the preface, the editors of the conference volume, Deshpande and Bronkhorst, say: "The Orientalist scholarship of the last two centuries has given new and various constructions to the received Aryan/non-Aryan distinction(s), constructions which have linguistic, racial, historical or even art-historical referents. Recently there have been reconsiderations and reinterpretations of the terms within and outside the academy. There is on the one hand the established view of a migration of Aryans into South Asia: on the other hand there are new voices calling the whole endeavor fanciful, motivated by colonialism, 'Orientalism,' nationalism, or something else. ... In South Asia the terms have also played a significant role in the recent growth of a politics of religious nationalism, and the reconstructions of South Asian history that goes with it. ... The time is past when it can be treated as a substantive question as to the 'facts' in isolation from historical and political overtones (p. i)."

In his article "Out of India? The linguistic evidence" in this conference volume, Hans H. Hock deals at length with the "Sanskrit origin" hypothesis of S.S. Misra. In the introduction of his article, Hock states that "the claim that the āryas are indigenous to India can therefore be reconciled with the relationship of Indo-Aryan to the rest of Indo-European only under one of two hypotheses: Either the other Indo-European languages are descended from the earliest Indo-Aryan, identical or at least close to Vedic Sanskrit, or Proto-Indo-European (PIE), the ancestor of all the Indo-European languages, was spoken in India and (the speakers of) all the Indo-European languages other than Sanskrit/

Indo-Aryan migrated out of India, Hock (1999: 1)." Hock calls the first of these the "Sanskrit origin" hypothesis and points out that it has been advocated by Satya Swarup Misra (Misra 1992). Misra attempts to demonstrate that Vedic Sanskrit is identical to Proto-Indo-European and that late 19th century arguments to the contrary are mistaken and biased against Sanskrit. Hock's detailed examination of Misra's arguments cannot be reproduced here, but Hock shows how Misra's interpretation does not agree with well-established principles and practices of comparative reconstruction. Hock also points out why given the geographical distribution of the Indo-European languages it is not possible to consider India to be the home of Proto-Indo-European, and concludes: "Niether the Sanskrit-origin variant nor the PIE-in-India variant, thus, turns out to provide credible support for the 'Out-of-India' hypothesis. Rather, the linguistic evidence still favors the prevailing Indo-Europeanist perspective that the speakers of Indo-Aryan migrated into India, Hock (1999: 17)." Hock's detailed arguments have provoked further indigenist responses by scholars like Koenraad Elst and others, but I have yet to see a convincing linguistic case made to support the indigenist 'Out-of-India' position.

In his important article "Linguistic substrata and the indigenous Aryan debate" in the same volume, Edwin Bryant (1999) has provided a comprehensive review of the linguistic arguments (later expanded into his 2001 book: *The Quest for the Origins of Vedic Culture: The Indo-Aryan Migration Debate*) and he concludes: "In short, all these linguists are operating on the assumption, based primarily on *other* criteria, that the Aryans 'must have' invaded India where there could not have been a 'linguistic vacuum'. Since Dravidian and Munda inadequately explain the changes visible in Sanskrit, many are forced to consider theories of extinct languages. How

the data could be convincingly reinterpreted if this assumption were to be reconsidered remains to be seen, since a comprehensive and objective case has yet to be made by the 'Indigenous Aryanists' despite their possessing the rudiments of a variety of alternative explanations already advanced by Western linguists in their disagreements amongst themselves. The hypothesis of a pre-Indo-Aryan linguistic substratum remains perfectly acceptable way of explaining the existence of the non-Indo-European features in Sanskrit. ... In conclusion, in my opinion, the theory of Indo-Aryan migrations into the Indian subcontinent must be primarily established without doubt *on other grounds* to be fully conclusive. The apparent 'evidence' of a linguistic substratum in Indo-Aryan, in and of itself, cannot be used as a decisive arbitrator in the debate over Indo-Aryan origins (Bryant 1999: 80)."

Bryant's 2001 book is the most comprehensive review of the Indo-Aryan migration debate that gives for the first time a fair hearing to the Out-of-India voices. After giving a fair hearing to both sides in the debate, expressing his personal opinion of the controversy between the indigenist Aryan view and the standard Aryan migrationist view, Bryant remarks: "On a personal note, I am accordingly sympathetic to the Indigenous Aryan 'school' (if, simply for ease of reference, I might be permitted to reify my motley group as a school) when I view it as a manifestation of a postcolonial rejection of European intellectual hegemony (since most of the voices are from India), especially my analysis has led me to realize exactly how malleable much of the evidence actually is. This does not mean that the Indigenous Aryan position is historically probable. The available evidence by no means denies the normative view—that of external Aryan origins and, if anything, favors it. But this view has had more than its fair share of airing over the last two centuries, and the

Indigenous Aryan position has been generally ignored or marginalized. What it does mean, in my view, is that Indigenous Aryanism must be allowed a legitimate and even valuable place in discussions of Indo-Aryan origins" (Bryant 2001, Introduction, p. 7). While one appreciates the service that Bryant (2001) and Bryant and Patton (2005) have done to the field by fairly reporting and bringing to full exposure arguments of the Indigenous Aryan school, their endeavor to offer level playing field to these arguments is occasionally liable to be misunderstood to imply that there is balanced and convincing scholarship in these writings. Such is not the case and the Indigenist Aryan school, even as one sympathizes with its venting of grievances against the colonial background of much of the earlier IE scholarship, has yet to develop a convincing linguistic argument. A fair selection of recent Out-of-India theory oriented articles can be found in Bryant-Patton (2005), besides some very important articles that indicate newer directions in our understanding of the Indo-Europeanist theory of Aryan migrations.

Promising New Directions in Linguistic Research

During the last five years, a high volume of exciting linguistic research has appeared that seems to indicate the likely path taken by the Indo-Iranians from areas to the north of the Central Asian region, through that region, and finally into the areas of Iran, Afghanistan, and India. This research points to a period where Uralic (Finno-Ugrian) speakers were in contact with Proto-Indo-Iranians to the north of the Bactria-Margiana region of Central Asia. Then several researchers uncover the linguistic interaction of the Proto-Indo-Iranians while they lived and gradually migrated southward through the Bactria-Margiana area in the direction of Iran and India. Much of this research combines linguistic and archaeological insights. This new research clarifies the path taken by the

Indo-Iranian branch from the northern Taiga belt through the Central Asian regions finally reaching Iran and India. Among this research I would count a number of papers by various scholars included in the volumes *Early Contacts between Uralic and Indo-European: Linguistic and Archaeological Considerations* (Helsinki 2001) and *Indo-Iranian Languages and Peoples* (2002, edited by Nicholas Sims-Williams). Very important are the articles in the first volume by E.E. Kuz'mina on "Contacts between Finno-Ugric and Indo-Iranian speakers in the light of archaeological, linguistic and mythological data" and by Alexander Lubotsky on "The Indo-Iranian Substratum." The second volume mentioned above contains important articles by J.P. Mallory on "Archaeological models and Asian Indo-Europeans" and by Asko Parpola on "From the dialects of Old Indo-Aryan to Proto-Indo-Aryan and Proto-Iranian." To this cutting edge work, I would like to add some illuminating recent articles by Michael Witzel on "Autochthonous Aryans? The Evidence from Old Indian and Iranian Texts" (2001) and "Linguistic Evidence for Cultural Exchange in Prehistoric Western Central Asia" (2003).

I would like to conclude this extensive survey of the history of the linguistic arguments by saying that historical linguistic research, like any other project of historical reconstruction, is always going to remain a work-in-progress. The linguistic arguments can provide only one indicator in reconstructing history of human populations. In recent years, there are extensive attempts to correlate linguistic data with archaeological data as well as with studies of the DNA structures. However, such correlations are fraught with serious problems. As Windfuhr (1997: 156) points out: "There is either common ground or agreement in many respects, including the recognition that genetic-linguistic relationships are not the same as ethnic or as biological relations. ... It is also agreed, however, that linguistics and archaeology operate with different data within different epistemologies. ... Neither ceramic patterns nor reconstructed rituals or cultures, or their particular assembly, allow for the reconstruction of the language, or languages, that was part of them. Language disappears and can only be reconstructed; artifacts are remains. Language change is not synchronized with cultural change." The ferment in these interdisciplinary approaches to reconstructions of Indo-Europeans and their specific branches like Indo-Iranian is manifest in the recent publications of scholars like Lamberg-Karlovsky (2002) and responses to his work by other scholars like Kuz'mina and Mallory. Similar interactions are taking place between biological and other approaches to historical reconstruction, cf. Shereen Ratnagar (1998 and 1999), Kivisild (1999). What we can expect from the on-going research is an open-ended approach to continually seeking new methods, refining the old ones, and search for previously unknown data, but not an axiomatic commitment to predetermined conclusions.

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1. The term "retroflex" to those sounds like ṭ that require the tongue to curl back and touch the top of the oral cavity. In the pronunciation of ṛ and ṣ, the tongue curls back, but does nottouch the top of the oral cavity. This curling back of the tongue is not involved in the pronunciation of the dental sounds.

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4

Agro-pastoralism and the Migrations of the Indo-Iranians

Shereen Ratnagar

Of all extant language families, the Indo-European is known to have the greatest geographic dispersal. As stated in the previous Chapter, this dispersal emanated from the grasslands of Europe and Central Asia, or Eurasia. The Indo-Iranian languages represent one of the cleavages of this huge family, a branching out that resulted in the independent development of languages such as Avestan whose speakers went to Iran and Vedic Sanskrit (Indo-Aryan) whose speakers went to India. In the pre-modern world, languages did not spread across the world unless those who spoke them did; and this paper is an attempt to trace one factor in the dispersal. This factor is a socio-economic system known as agro-pastoralism, which is a system more complex than a simple combination of pastoral and agricultural land use.

What we know about the people who spoke and introduced Vedic Sanskrit in India comes primarily from the *Ṛg Veda.* Reading this text as a source of information on the early Aryan migrants and their religion is not an easy task. We need a perspective on the social circumstances in which